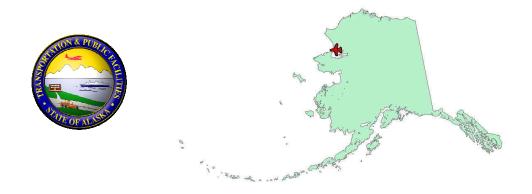


KOTZEBUE AIRPORT



2004 Alaska Airport Pavement Condition Report

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Maps and report compiled by
H. June Finkbiner
Central Region Materials, Alaska DOT&PF

RALPH WEIN MEMORIAL AIRPORT KOTZEBUE - 2004

Contents:

- A Pavement Strength Form showing project history, latest Pavement Condition Index (PCI) data, pavement strength ratings (if available) and other useful information
- A Pavement Condition Survey PCI Sample Unit Layout Plan
- PCI maps showing as-measured and predicted pavement conditions
- Age map showing pavement age as of January 2004
- A Branch PCI Condition Report
- A Section PCI Condition Report

Airport Information:

Location:

Ralph Wein Memorial Airport is located on the northwest tip of the Baldwin Peninsula on the northwest coastal area of Alaska. The city of Kotzebue is just north of the airport. It is accessible only by air and water. This is a commercial airport with fences and controlled access.

District: Western District, Northern Region

Airport Manager: Kenny Gallahorn
 District Maintenance Manager: Patrick Kelliher
 Pavement Surface: Asphalt Concrete

Last Pavement Construction: 1994

• Pavement layout:

The main runway (8-26) is 5,900' long and 150' wide with unpaved shoulders. There is a 3896' long gravel surface crosswind runway (17-35) accessed by Taxiway F on the airport, but this was not included in the pavement condition survey. The current asphalt concrete surfacing has construction dates varying from 1975 to 1994. The 1994 project provided new asphalt concrete surfacing of Runway 8-26 made by recycling the existing base course on the runway. Taxiways A-F and the apron are paved in support of runway 8-26 traffic. The west 2300' of Runway 8-26 is insulated with polystyrene foam insulation at a depth of 42" below the surface. The rest of the runway is insulated.

• Design Aircraft: B-727

• 2002 Enplanements: 56,458 – up 8% from 2002

Airport Class: PrimaryLast pavement condition survey: 2004

conducted by Angela Parsons and Roy Stover of Central Region Materials

- Next planned pavement condition survey: 2007
- 2004 reported pavement maintenance and/or changed conditions: Patching was done on the runway keel between Taxiways D and E. Patching was also done on Taxiway C and on the apron section 4200-02, just east of T/W B. Crack sealing is needed next year. Taxiway E is sinking and will need patching next year too.
- **Recommendations:** See PCI maps. Seal cracks that are greater than ¹/₄" wide and patch with cold mix as required to maintain serviceability.

Date: 1 /14/2005

Branch Condition Report

1 of 2

Pavement Database: NetworkID: Kotzebue

Avg Section Number of Sum Section PCI Weighted True Area Use **Average Branch ID Sections** Length Width Standard Average (SqFt) PCI PCI (Ft) (Ft) Deviation 100 (TAXIWAY A) 400.00 **TAXIWAY** 0.00 1 50.00 20,000.00 87.00 87.00 200 (TAXIWAY B) 1 400.00 50.00 20,000.00 **TAXIWAY** 0.00 67.00 67.00 300 (TAXIWAY C) 3 430.00 139.00 49,760.00 **TAXIWAY** 55.33 19.14 61.57 400 (TAXIWAY D) 3 367.00 126.67 43,793.00 **TAXIWAY** 50.00 34.32 56.94 4100 (MAIN APRON) 2 1,950.00 350.00 630,000.00 **APRON** 86.00 1.00 86.33 500 (TAXIWAY E) 3 505.00 193.33 63,000.00 **TAXIWAY** 61.33 26.66 62.86 600 (TAXIWAY F) 1 1,300.00 50.00 69,200.00 **TAXIWAY** 34.00 0.00 34.00 6100 (RUNWAY 8-26) 8 17,905.00 914,250.00 **RUNWAY** 75.00 54.63 5.70 53.46 Date: 1 /14/2005

Branch Condition Report

2 of 2

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	2	630,000.00	86.00	1.00	86.33
RUNWAY	8	914,250.00	54.63	5.70	53.46
TAXIWAY	12	265,753.00	57.33	26.62	56.26
All	22	1,810,003.00	58.95	21.75	65.31

Date: 1/14/2005

Section Condition Report

Pavement Database:

NetworkID: Kotzebue

Last Age Section ID Surface Use PCI **Branch ID** Last Rank Lanes True Area Inspection Αt Const. (SqFt) Date Inspection **Date** 100 (TAXIWAY A) **TAXIWAY** S 20,000.00 06/28/2004 100-01 09/08/1994 AC 10 87.00 09/08/1994 **TAXIWAY** 20,000.00 06/29/2004 200 (TAXIWAY B) 200-01 AC S 0 10 67.00 300 (TAXIWAY C) 300-01 09/11/1975 AC **TAXIWAY** Ρ 16,550.00 06/28/2004 29 38.00 300 (TAXIWAY C) 300-02 09/08/1994 AAC **TAXIWAY** Ρ 0 8,010.00 06/28/2004 10 46.00 300 (TAXIWAY C) Ρ 300-03 08/15/2002 AC **TAXIWAY** 0 25,200.00 06/28/2004 2 82.00 400 (TAXIWAY D) 400-01 09/07/1975 AC **TAXIWAY** Ρ 0 10,793.00 06/29/2004 29 7.00 400 (TAXIWAY D) 400-02 09/09/1994 AAC **TAXIWAY** Ρ 0 15,000.00 06/29/2004 10 52.00 400 (TAXIWAY D) **TAXIWAY** Ρ 400-03 08/15/2002 AC 0 18,000.00 06/29/2004 2 91.00 4100 (MAIN APRON) 08/15/2002 **APRON** Ρ 420,000.00 06/29/2004 2 4100-01 AC 87.00 4100-02 **APRON** Ρ 4100 (MAIN APRON) 08/15/2002 AC 0 210.000.00 06/29/2004 2 85.00 Ρ 17,450.00 06/29/2004 500 (TAXIWAY E) 500-01 09/11/1985 AC **TAXIWAY** 0 19 41.00 500 (TAXIWAY E) **TAXIWAY** Ρ 500-02 09/09/1994 AAC 23,000.00 06/29/2004 10 44.00 **TAXIWAY** Ρ 500 (TAXIWAY E) 500-03 08/15/2002 AC 0 22,550.00 06/29/2004 2 99.00 600 (TAXIWAY F) 600-01 09/11/1975 AC **TAXIWAY** S 0 69,200.00 06/28/2004 29 34.00 6100-01A Ρ 131,000.00 06/28/2004 6100 (RUNWAY 8-26) 09/09/1994 AC **RUNWAY** 0 53.00 10 Ρ 6100 (RUNWAY 8-26) 6100-01B 09/08/1994 AC **RUNWAY** 0 131,000.00 06/28/2004 10 60.00 6100 (RUNWAY 8-26) 6100-01C 09/09/1994 AC **RUNWAY** Ρ 0 131,000.00 06/28/2004 10 46.00 6100 (RUNWAY 8-26) **RUNWAY** Ρ 164,250.00 06/28/2004 6100-02A 09/09/1994 AC 10 48.00 6100 (RUNWAY 8-26) 6100-02B 09/08/1994 AC **RUNWAY** Ρ 0 164,250.00 06/28/2004 10 59.00 6100 (RUNWAY 8-26) **RUNWAY** Ρ 0 6100-02C 09/09/1994 AC 164,250.00 06/28/2004 10 53.00 6100 (RUNWAY 8-26) 6100-03 09/08/1994 AC **RUNWAY** Т 0 6,000.00 06/28/2004 10 54.00 6100 (RUNWAY 8-26) AC **RUNWAY** Т 0 22,500.00 06/28/2004 6100-04 09/11/1985 19 64.00

1 of 2

Date: 1 /14/2005

Section Condition Report

Pavement Database:

Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
0-02	2.00	695,750.00	5	88.80	5.88	86.71
06-10	10.00	977,760.00	12	55.75	11.37	53.87
16-20	19.00	39,950.00	2	52.50	11.50	53.95
26-30	29.00	96,543.00	3	26.33	13.77	31.67
All	11.59	1,810,003.00	22	58.95	21.75	65.31

2 of 2

		PAVEM	ENT STREN	IGTH SURVEY	<u>′</u>							
STATE Alask	a	CITY	Kotzebue	AIRPORT	Ralph Wein Memorial				This is a vari	ation of FAA Form	5320-1-1	
		CONSTR	UCTION DATES									
IDENT.	NAME	ORIG.	OVERLAY	CONSTRUCTION AGENCY	SOURCE OF INFORMATION	Existing Pavement Conditions (PCI) at last inspection RUNWAY 8-26	Soil Class	Subbase Course	Base Course	Surface Course	Overlay	Pavem Strenç
								8" (pre 1994), PS insulation at 42"	8" CABC			S100, T
6100-01A	Runway (west) Section 1		1994		AIP 3-02-0160-06	53		below surface	(pre 1994)	3" AC		ST162,T
								8" (pre 1994), PS insulation at 42"	8" CABC			S100, T
6100-01B	Runway (west) Section 1		1994		AIP 3-02-0160-06	60		below surface	(pre 1994)	3" AC		ST162,T
								8" (pre 1994), PS	O" CARC			C100 T
6100-01C	Runway (west) Section 1		1994		AIP 3-02-0160-06	46		insulation at 42" below surface	8" CABC (pre 1994)	3" AC		S100, T ST162,T
			4004						5.5" CABC			S100, T
6100-02A	Runway (east) Section 2		1994		AIP 3-02-0160-06	48		8" (pre 1994)	(pre 1994) 5.5" CABC	3" AC/2.5" RAP		ST162,T S100, T
6100-02B	Runway (east) Section 2		1994		AIP 3-02-0160-06	59		8" (pre 1994)	(pre 1994)	3" AC/2.5" RAP		ST162,T
6100-02C	Runway (east) Section 2		1994		AIP 3-02-0160-06	53		8" (pre 1994)	5.5" CABC (pre 1994)	3" AC/2.5" RAP		S100, T ST162,T
6100-03	Runway west over run		1994		AIP 3-02-0160-06	54		O (pro 1994)	(pro 1994)	3" AC		01102,1
6100-04	Runway east over run	1985				64				3" AC		
100-01	Taxiway A	1994		1	AIP 3-02-0160-05	TAXIWAYS 87			2" RAP	2" AC		
200-01	Taxiway B	1994			AIP 3-02-0160-05	67			2" RAP	2" AC		
300-01	Taxiway C	1975			AUD 0 00 0400 05	38				AC		
300-02 300-03	Taxiway C Taxiway C	1994 1975	2002		AIP 3-02-0160-05	46 82				AC AC		
								24" Emb./4"				
400-01	Taxiway D	1975			As-Builts from Nome	7		insulation 24" Emb./4"	9" CABC	3" AC		
400-02	Taxiway D	1994			As-Builts from Nome	52		insulation	9" CABC	3" AC		
400-03	Taxiway D	1975	2002			91		24" Emb./4"		AC	AC	
500-01	Taxiway E	1985			As-Builts from Nome	41		insulation	9" CABC	2" AC		
								24" Emb./4"				
500-02 500-03	Taxiway E Taxiway E	1994 1985	2002		As-Builts from Nome	44 99		insulation	9" CABC	2" AC AC	AC	
600-01	Taxiway F	1975				34				RAP		
						APRONS						
	West Apron (east side of											
4100-01	apron)	1985	2002		As-Builts from Nome	87			9" CABC	3" AC	AC	
4100-02	West Apron (west side of apron)	1975	2002			85				AC	AC	
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